

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

A74EU
Revision 1
HOAC-Austria

DV 20 KATANA

April 7, 1994

TYPE CERTIFICATE DATA SHEET No. A74EU

This data sheet which is a part of the Type Certificate No. A74EU prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder. HOAC-Austria
 Flugzeugwerk Wr. Neustadt Ges.m.b.H
 N.A. Otto-Straße 5
 A-2700 Wiener Neustadt
 Austria

I. Model DV 20 KATANA (VLA-Special Class Category), approved March 1, 1994

Engine. Rotax 912 A3.

Fuel. Aviation gasoline 100 LL or automotive super, leaded or unleaded,
 minimum ROZ 95 octane.

Oil. API System "SF" or "SG" multi grade (See AFM recommendations)
 Do not use aviation grade lubricants

Engine Limits. Max. T/O speed (5 min): 5800 r.p.m. (80 HP)
 Max. Cont. speed: 5500 r.p.m. (78 HP)

Propeller and Propeller Limits. Hoffmann HO-V72F/S170DW, hydraulic/variable pitch constant speed
 propeller,
 Diameter range 66.9 in(+0,-0.39in.), 170cm (+0, -10mm)

or

Hoffman HO-V352F/170FQ, hydraulic variable pitch constant speed
propeller,
Diameter range 67.3 in (+0, -39 in), 170

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Propeller and Propeller Limits.
(Continued)

Reduced propeller speed, step-down ratio: 1:2.2727 (compared to engine speed).

No. of Blades: Two
Pitch: 10° - 35° (75% station)
Max. Takeoff RPM (5 min): 2550
Max Continuous RPM: 2420
Direction of Rotation: Clockwise (viewed from rear)

Airspeed Limits (C.A.S.).

Never Exceed Speed: V_{NE} 157 kts, 181 mph, 291 km/h.

Maximum

- Maneuvering Speed V_A 104 kts, 120 mph, 193 km/h.

- Cruise Speed V_{NO} 116 kts, 134 mph, 215 km/h.

- Speed, Flaps Extended V_{FE}
Position 1 81 kts, 93 mph, 150 km/h.
Position 2 81 kts, 93 mph, 150 km/h.

C.G. Range.

Forward limit (all weights) 250 mm (9.84 in) aft of reference datum,
Aft limit (all weights) 390 mm (15.35 in) aft of reference datum.

Reference Datum.

Wing leading edge at wing root.

Leveling Means.

Wedge 52:1000 horizontal, on top surface of fuselage tube, 500 mm (19.69 in.) forward of rudder fin.

Empty Weight C.G. Range.

See Maintenance Manual, Doc. No. 4.02.02, Section 08.

Maximum Weight.

730 kg (1609 lbs.).

Minimum Crew.

1 pilot.

No. of Seats.

Two, 143 mm (5.63 in.) aft of reference datum.

Equipment and Baggage Weights.

Baggage: 20 kg (44 lbs.), 824 mm (32.44 in.) aft of reference datum.

Fuel Capacity.

79 liters (20.9 U.S. gal), 824 mm (32.44 in.) aft of reference datum.
Usable 77 liters (20.3 U.S. gal.).
(See NOTE 1)

Oil Capacity.

3 liters (3.2 U.S. qt.) maximum, 2 liters (2.1 U.S. qt.) minimum,
1060 mm (41.7 in.) forward of reference datum.
(See NOTE 1)

Coolant Capacity.

2.5 liters (2.6 U.S. qt.) maximum, 2.4 liters (2.5 U.S. qt.) minimum,
1060 mm (41.7 in.) forward of reference datum.

Control Surface Movements.

CONTROL	MOVEMENT (°)	TOLERANCE (°)
WING	0 (UP)	± 1
FLAP	15 (T/O)	± 1
	40.5 (LDG)	± 1.5
AILERON	16 (up)	± 1
	13 (down)	± 1
RUDDER	30 (left/right)	± 1
ELEVATOR	16 (pulled) UP	± 1
	14 (pushed) DOWN	± 1
TRIM TAB (neutral)	-16 (elev. pulled)	± 4
	0 (elev. neutral)	± 2
	+23 (elev. pushed)	± 3
TRIM TAB (nose down)	-35 (elev. pulled)	± 3
TRIM TAB (nose up)	+57 (elev. pushed)	± 3

See Maintenance Manual, Doc. No. 4.02.02, Section 06.

Serial Numbers Eligible.

Each individual aircraft manufactured under this type certificate must be accompanied by a Certificate of Airworthiness for Export (or certifying statement endorsed by the Exporting Civil Airworthiness Authority as noted below under "Import Requirements") when an application for a U.S. Airworthiness is made.

DV 20 KATANA: 20.033 and subsequent

Serial Numbers 20.005 through 20.032 are eligible for import and a standard airworthiness certificate when modified in accordance with SB 20-5, and any other applicable Service Bulletins have been accomplished.

Import Requirements.

A U.S. Standard Airworthiness Certificate may be issued in the "VLA-Special Class" category on the basis of a Certificate of Airworthiness for Export endorsed by a representative of Austro Control GmbH (ACG) containing the following statement: "The aircraft covered by this certificate has been examined, tested and found to conform to the type design approved under Type Certificate No. A74EU and is in a condition for safe operation."

Certification Basis.
FAR 21.17(b)

JAR-VLA effective April 26, 1990, THROUGH AMENDMENT VLA/92/1 effective 1.1.92; JAR 22, SUBPARTS H and J issued April 1, 1980, CHANGE 4 (AMEND. 22/92/1, EFF 1.1.92); and FAR 36, dated December 1, 1969, SUBPARTS A and F, through Amendment 36-20 effective September 16, 1992.

Validation Basis.

Type Certificate A74EU was issued pursuant to FAR 21.29 in validation of a Austro Control GmbH (ACG) certification of compliance with the aforementioned certification basis, and in accordance with the standard airworthiness certificate provisions of FAR 21.183(c).

Equipment.

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for airworthiness certification. In addition, the following items of equipment are required:
Model DV 20 KATANA - ACG Approved (for FAA) Flight Manual, HOAC Austria Doc. No. 4.01.03, issued January 4, 1994, or later ACG approved revision.

NOTES.

NOTE 1.

A current weight and balance report including list of equipment in certificated empty weight, and loading instructions, must be provided with each aircraft at the time of original airworthiness certification, and at all times thereafter.

The certificated empty weight and the corresponding center of gravity location must include full oil (1.18lbs. at 41.7 inches), and unusable fuel a 3.31 lbs (1.5 kg) at 32.44 inches.

NOTE 2.

Placards (Refer to Manufacturer's Specifications for a complete listing): All required placards as listed in the approved Airplane Flight Manual must be installed in the appropriate locations.

(1) The following placard must be displayed in clear view of the pilot:

Maneuvering speed: $V_A = 104$ kts.

This airplane must be operated as a VLA-Special Class Category airplane. It is approved for day VFR only, in non-icing conditions. All aerobatic maneuvers including intentional spinning are prohibited. See Flight Manual for other limitations.

(2) Refer to the Flight Manual, Chapter 2, Operating Limitations for a listing of other required placards.

NOTE 3.

Instructions for Continued Airworthiness and Service Life Limits of components are contained in the DV 20 KATANA Maintenance Manual.

The life limit for the airframe is 6000 flight hours.

Revisions to Airworthiness Limitations must be FAA approved.

All manufacturer's service bulletins (and other manual material) which contain a statement that the document is approved by the exporting airworthiness authority (ACG) may be interpreted as FAA approved. These approvals pertain to the type design only.

All service bulletins classified as Mandatory by the Austrian Civil Aviation Authority are identified to that effect and are subject to an Airworthiness Directive issued by the FAA.

NOTE 4.

All external portions of the airplane exposed to sunlight must be painted white except of the areas of markings and warning marks.

NOTE 5.

Major structural repairs must be accomplished at FAA-certified repair stations in accordance with HOAC repair methods approved by ACG (for the FAA).

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